

Notice of Allowability

Application No.

10/082,850

Examiner

Jacques Veillard

Applicant(s)

KIRAN ET AL.

Art Unit

2165

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to applicant's communication filed on 6/6/2005 and Examiner's amendment on 8/10/2005.
2. ☒ The allowed claim(s) is/are 1-7 and 10-21.
3. ☒ The drawings filed on 25 February 2002 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date 8/10/2005
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

JEFFREY GAFFIN
SUPERVISORY PATENT EXAMINER

2

DETAILED ACTION

1. This action is responsive to the Applicant's amendment filed on 6/6/2005.
2. Claims 8-9 has been canceled, and claims 20-21 have added.
3. Claims 1-7, 10-21 are pending and presented for examination.

EXAMINER'S AMENDMENT

4. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Timothy F. Bliss (Reg. No. 50,925) the undersigned for applicant(s) on August 10, 2005.

The application has been amended as follows:

In the claims:

1. (Currently amended) A computer-executable method for grouping one or more interested objects in a directory system based on their corresponding access patterns with regard to other objects, wherein an the access pattern of an interested object ~~being~~ is defined by other objects which the interested object has accessed or by which the interested object has been accessed, the method comprising:

putting each interested object in a singleton cluster, the singleton cluster having only one such interested object ~~member~~;

Art Unit: 2165

performing an access ratio test based on first and second singleton clusters to calculate an access ratio; and

merging the first and second singleton clusters into a third cluster only if [[a]] the access ratio conforms to a predetermined threshold wherein the access ratio is defined as a ratio between an access pattern of each interested object of the first and second singleton clusters and a combined access pattern, and wherein in terms of objects associated with each of the first and second singleton clusters and a the combined access pattern is defined in terms of interested objects that would be associated with the third cluster (the "Access Ratio") conforms to predetermined threshold, if the first and second singleton clusters were merged,

wherein the step of merging is repeated until no more clusters can be merged.

10. (Currently amended) Computer-executable instructions for grouping one or more interested objects in a directory system based on their corresponding access patterns with regard to other objects, wherein an the access pattern of an interested object being is defined by other objects which the interested object has accessed or by which the interested object has been accessed, the functional data comprising instructions comprising instructions for:

putting each interested object in a singleton cluster, the singleton cluster having only one such interested object member,

performing an access ratio test based on first and second singleton clusters to calculate an access ratio; and

merging the first and second singleton clusters into a third cluster only if [[a]] the access ratio conforms to a predetermined threshold wherein the access ratio is defined as a ratio

Art Unit: 2165

between an access pattern of each interested object of the first and second singleton clusters and a combined access pattern, and wherein in terms of objects associated with each of the first and second singleton clusters and a the combined access pattern is defined in terms of interested objects that would be associated with the third cluster (the "Access Ratio") conforms to predetermined threshold, if the first and second singleton clusters were merged,
wherein the merging is repeated until no more clusters can be merged.

13. (Currently amended) A computer system having a plurality of instructions for grouping one or more interested objects in a directory system based on their corresponding access patterns with regard to other objects, wherein an the access pattern of an interested object being is defined by other objects which the interested object has accessed or by which the interested object has been accessed, the system comprising:

instructions for putting each interested object in a singleton cluster, the singleton cluster having only one such interested object ~~member~~;

performing an access ratio test based on first and second singleton clusters to calculate an access ratio; and

merging the first and second singleton clusters into a third cluster only if [[a]] the access ratio conforms to a predetermined threshold wherein the access ratio is defined as a ratio between an access pattern of each interested object of the first and second singleton clusters and a combined access pattern, and wherein in terms of objects associated with each of the first and second singleton clusters and a the combined access pattern is defined in terms of interested objects that would be associated with the third cluster (the "Access Ratio") conforms to

Art Unit: 2165

~~predetermined threshold, if the first and second singleton clusters were merged,~~

wherein the step of merging is repeated until no more clusters can be merged.

Allowable Subject Matter

5. Claims 1-7, and 10-21 are allowed over the prior art of record.

6. The following is an examiner's statement of reasons for allowance: The examiner, upon conducting a variety databases searches, respectfully submits that "performing an access ratio test based on first and second singleton clusters to calculate an access ratio; and merging the first and second singleton clusters into a third cluster only if the access ratio conforms to a predetermined threshold wherein the access ratio is defined as a ratio between an access pattern of each interested object of the first and second singleton clusters and a combined access pattern, and wherein the combined access pattern is defined in terms of interested objects that would be associated with the third cluster if the first and second singleton clusters were merged, and repeatedly performing the access ratio test based on a pair of singleton clusters, a pair of group clusters, or a pair of singleton and group clusters, and merging each pair that the access ratio test indicates should be merged until all pairs indicated by the access ratio test as able to be merged have been merged" as embodied in the independent claims 1, 10, 13, and 20, in context with the other limitations of the claims was not disclosed by, would not have been obvious over, nor would have been fairly suggested by the prior art of record.

The closest prior art Schuetze et al. (U. S. Pat No. 6,598,054) disclose a system for assigning data object in a collection to clusters based on similarities in their contents and

Art Unit: 2165

characteristics. However, Schuetze et al. Taken singularly or in combination fail to anticipate or render obvious Applicant's limitations above obvious.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jacques Veillard whose telephone number is (571) 272-4086. The examiner can normally be reached on Mon. to Fri. from 9 AM to 4:30 PM, alt. Fri. off..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Gaffin can be reached on (571) 272- 4146. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

J.V
Jacques Veillard
Patent Examiner TC 2100



JEFFREY GAFFIN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

August 11, 2005